

REMARKS

Claims 1, 2, 4-7 and 9-11 are pending in this application, claims 9 and 10 having been withdrawn from consideration. By this Amendment, the specification and claims 1, 4 and 7 are amended, claims 3 and 8 are cancelled and claim 11 is added. Support for the amendments to claims 1, 4 and 7 and new claim 11 can be found, for example, in the instant specification at paragraphs [0004], [0005] and [0039], and in original claims 1, 3, 4, 7 and 8. No new matter is added. In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

Information Disclosure Statement

An Information Disclosure Statement with Form PTO-1449 was filed in the above-captioned patent application on July 3, 2003. The initialed copy of the PTO-1449 attached to the Office Action fails to acknowledge consideration of the references numbered "1" and "2." The initialed Form PTO-1449 asserts references "1" and "2" were "not received." Applicants submit that the references were attached to the July 3, 2003 Information Disclosure Statement, and were subsequently transmitted to the Examiner by facsimile with the November 16, 2005 Request for Acknowledgement of Consideration of Disclosed Information. References "1" and "2" (JP B2 4-8394 and JP U 54-4263) are again provided herewith for the Examiner's convenience.

As indicated in the July 3, 2003 Information Disclosure Statement, the significance of the non-English language references is discussed in the instant specification. Accordingly, the Examiner is requested to initial and return to the undersigned a copy of the subject Form PTO-1449 acknowledging consideration of the references numbered "1" and "2." For the convenience of the Examiner, a copy of that form is attached.

Restriction Requirement

As acknowledged in the Office Action, upon allowance of the pending product claims, any method claims reciting the features of one or more allowed product claims shall be rejoined to the instant application and examined. *See* MPEP §821.04.

Rejection Under 35 U.S.C. §103

The Office Action rejects claims 1-8 under 35 U.S.C. §103(a) over U.S. Patent No. 6,165,590 to Takagi et al. ("Takagi"). By this Amendment, claims 3 and 8 are cancelled, rendering the rejection moot as to those claims. As to the remaining claims, Applicants respectfully traverse the rejection.

Claim 1 recites "[a] fine feldspathic earthenware comprising a body and a glaze layer ... an annular bottom ... wherein ... said glaze layer being absent on a surface of said annular bottom; said surface of said annular bottom being covered with an annular vitrified layer which has substantially no water absorbing property; said annular vitrified layer being formed of a composition that has a lower degree of refractoriness than said body and a higher degree of refractoriness than said glaze layer; and said composition being vitrified when said body is biscuit-fired, and said composition not being fused when said body is glost-fired" (emphasis added). Takagi does not teach or suggest such earthenware.

The Office Action asserts that Takagi discloses a method for glazing ceramics in which a first glaze is formed on relief surfaces of an article and a second glaze is formed on non-relief surfaces of the article. The Office Action further asserts that the glazes disclosed in Takagi would have the properties of the glaze layer and the annular vitrified layer of claim 1. Notwithstanding these assertions, Takagi would not have rendered obvious the earthenware of claim 1.

The Office Action correctly points out that Takagi discloses a ceramic article including a substrate 1' having a relief surface 1R' and a non-relief surface 1S'. *See, e.g.*, FIG.

4. The relief surface 1R' is provided with a thin glaze layer 2' and the non-relief surface 1S' is provided with thick glaze layer 5'. *See id.* There is no teaching or suggestion, however, that the thin glaze layer 2' and the thick glaze layer 5' should have different properties, much less that the layers 2', 5' should differ in degrees of refractoriness. Rather, in Takagi, the thin glaze layer 2' and the thick glaze layer 5' are formed by co-firing the thin glaze layer 2 and the glaze slurry 5 at the same temperature to form the thin glaze layer 2' and the thick glaze layer 5'. *See* column 10, lines 53 to 59. As the thin glaze layer 2' and the thick glaze layer 5' in Takagi are formed by co-firing at the same temperature, one of ordinary skill in the art would not have been motivated from the teachings of Takagi to select materials for the thin glaze layer 2' and the thick glaze layer 5' having different degrees of refractoriness, such as the materials that form the glaze layer and the annular vitrified layer recited in claim 1. Rather, Takagi teaches away from selecting materials having different degrees of refractoriness, stating "[t]he glaze used for the glaze slurry for forming the thin glaze layer is preferably the same glaze as used for the glaze slurry to be affixed to the base surface other than the relief surface." *See* column 6, line 66 to column 7, line 2 (emphasis added). One of ordinary skill in the art, based on the teachings of Takagi, would have selected materials for the thin glaze layer 2' and the thick glaze layer 5' having substantially the same degree of refractoriness.

Moreover, the thin glaze layer 2 and the glaze slurry 5 disclosed in Takagi are both fused to the substrate 1 after co-firing. In contrast, in claim 1, the composition from which the annular vitrified layer is formed is vitrified when the body of the earthenware article is biscuit-fired, and the composition is not fused when the body is glost-fired. The Office Action makes the bald assertion that the "compositions of Takagi are commensurate with the instant claims ... therefore, the characteristics of the coatings are expected to be similar." *See* page 4. For the foregoing reasons, the compositions of Takagi are not similar to the materials

recited in claim 1 and, thus, one of ordinary skill in the art would not expect that the compositions would have comparable properties.

As discussed in the instant specification, the present inventors sought to address problems arising in producing earthenware, including undesired adhesion to glost-fired articles of fragments from projections of a refractory jig (*see* [0004]), difficulty in removing such fragments and resulting ground spots (*see* [0005]), and safety risks caused by such fragments (*see* [0006]). The present inventors unexpectedly discovered that such problems could be overcome by employing an annular vitrified layer such as recited in claim 1. Takagi does not recognize such difficulties, and Takagi does not teach or suggest a product providing solutions thereto.

As Takagi fails to teach or suggest an earthenware including an annular vitrified layer formed of a composition having a lower degree of refractoriness than a body of the earthenware and a higher degree of refractoriness than a glaze layer of the earthenware, the composition being vitrified when the body is biscuit-fired, and the composition not being fused when the body is glost-fired, Takagi fails to teach or suggest each and every element of claim 1.

Claim 1 would not have been rendered obvious by Takagi. Claims 2 and 4-7 depend from claim 1 and, thus, also would not have been rendered obvious by Takagi. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

New Claim

By this Amendment, new claim 11 is presented. New claim 11, like claim 1, recites "said glaze layer being absent on a surface of said annular bottom; said surface of said annular bottom being covered with an annular vitrified layer which has substantially no water absorbing property; said annular vitrified layer being formed of a composition that has a lower degree of refractoriness than said body and a higher degree of refractoriness than said

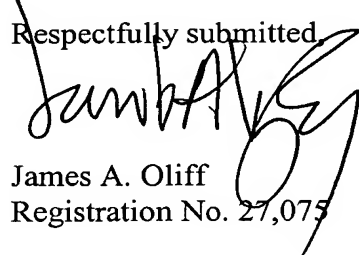
glaze layer; and said composition being vitrified when said body is biscuit-fired, and said composition not being fused when said body is glost-fired." Accordingly, for at least the reasons discussed above with respect to claim 1, claim 11 is patentable over the prior art of record. Prompt examination and allowance of claim 11 are respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 2, 4-7 and 9-11 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted


James A. Oliff
Registration No. 27,075

Jacob A. Doughty
Registration No. 46,671

JAO:JAD/hs

Attachment:

JP B2 4-8394
JP U 54-4263
Form PTO-1449

Date: February 3, 2006

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
